

REMARKS

This Amendment and Response to Final Office Action is submitted in response to the final Office Action mailed January 31, 2006. Claims 1-33 are pending in the Application. Claims 1-33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Britton et al. (U.S. Patent No. 6,401,136) in view of Piskiel et al. (U.S. Patent No. 5,916,307).

Claims 1, 12, and 23 have been amended to further clarify the subject matter which Applicants regard as the invention. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. Based upon the amendments, reconsideration of the Application, without further search, is respectfully requested in view of the following remarks.

Rejection of Claims 1-33 Under 35 U.S.C. 103(a) – Britton et al. and Piskiel et al.:

Claims 1-33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Britton et al. (U.S. Patent No. 6,401,136) in view of Piskiel et al. (U.S. Patent No. 5,916,307).

Specifically, in regard to Claim 1, Examiner states that Britton et al. disclose a method, implemented by a communication coordinator on a module, for carrying out reliable communication in a system, comprising: receiving a message from a sender intended for one or more applications, said message comprising a message identifier; determining based upon said message identifier whether said message had previously been received; and in response to a determination that said message had previously been received, foregoing delivery of said message to said one or more applications.

Additionally, Examiner states that although Britton et al. do not specifically teach wherein a message exchange between a sender and a receiver is conducted ensuring that a message is delivered to a recipient at most once, Piskiel et al. do and it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teaching of Piskiel et al. within the system of Britton by implementing a message exchange between a sender and a receiver, conducted ensuring that a message is delivered at most once within the reliable communication method because Piskiel et al. teach that such implementation improves performance and Britton et al. attempt to improve performance.

Claim 1 has been amended to recite:

A method, implemented by a communication coordinator on a module, for carrying out reliable communication in a communication system, comprising:

receiving a message from a sender intended for one or more applications, said message comprising a message identifier;

determining based upon said message identifier whether said message had previously been received; and

in response to a determination that said message had previously been received, foregoing delivery of said message to said one or more applications;

wherein a message exchange between a sender and a receiver is conducted ensuring that a message is delivered to a recipient at most once; and

wherein a subscriber is enabled to subscribe to multiple events using a single namespace specification and a single subscription request.

Likewise, Claim 12 has been amended to recite:

An apparatus for implementing reliable communication in a communication system, comprising:

a mechanism for receiving a message from a sender intended for one or more applications, said message comprising a message identifier;

a mechanism for determining based upon said message identifier whether said message had previously been received; and

a mechanism for foregoing, in response to a determination that said message had previously been received, delivery of said message to said one or more applications;

wherein a message exchange between a sender and a receiver is conducted ensuring that a message is delivered to a recipient at most once; and

wherein a subscriber is enabled to subscribe to multiple events using a single namespace specification and a single subscription request.

Likewise, Claim 23 has been amended to recite:

A computer readable medium comprising instructions which, when executed by one or more processors, cause the one or more processors to implement reliable communication in a communication system, said computer readable medium comprising:

instructions for causing one or more processors to receive a message from a sender intended for one or more applications, said message comprising a message identifier;

instructions for causing one or more processors to determine based upon said message identifier whether said message had previously been received; and

instructions for causing one or more processors to forego, in response to a determination that said message had previously been received, delivery of said message to said one or more applications;

wherein a message exchange between a sender and a receiver is conducted ensuring that a message is delivered to a recipient at most once; and

wherein a subscriber is enabled to subscribe to multiple events using a single namespace specification and a single subscription request.

These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added.

The reliable communication method of the present invention enables a subscriber to subscribe to multiple events using a single namespace specification and a single subscription request. By providing this capability, the need is eliminated for the subscriber to separately subscribe to each event. In systems in which many subscribers subscribe to many events, this capability can lead to significant improvement in efficiency and scalability.

In currently available alternatives to the reliable communication method of the present invention, it is not possible to subscribe to a plurality of events using a single name expression. Rather, a subscriber is required to subscribe to each individual event name separately. For systems with large numbers of events, this approach can quickly become inefficient and non-scalable.

In contrast, in present invention, there is provided a capability within the reliable communication method to subscribe to multiple namespaces using a single namespace expression and a single subscription registration request. The namespace expression may contain wildcard characters, such as *. When processing registration requests involving

namespace expressions, the namespace server performs pattern matching to resolve the namespace expressions to determine which specific namespaces match the expressions. Then, the namespace server automatically subscribes to the specific matching namespaces. By processing namespace expressions in this manner, the namespace server makes it possible to subscribe to multiple namespaces using a single relatively simple namespace expression. This in turn can lead to significant efficiency and scalability gains.

Britton et al. do not disclose a reliable communication method wherein a subscriber is enabled to subscribe to multiple events using a single namespace specification and a single subscription request. Furthermore, this deficiency is not remedied by Piskiel et al.

Claims 2-11 are dependent claims dependent on Claim 1. Claims 13-22 are dependent claims dependent on Claim 12. Claims 24-33 are dependent claims dependent on Claim 23.

Based on the same unique and novel features of the present invention as described above, namely that, as amended, Claims 1, 12, and 23 have unique and patentable novel features, precisely that they provide that a subscriber is enabled to subscribe to multiple events using a single namespace specification and a single subscription request, it is respectfully asserted that these dependent claims are now in condition for allowance.

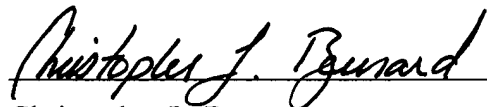
The differences between the invention of Britton et al. and the invention of the present Application are now made explicit in amended Claims 1, 12, and 23. Therefore, Applicants submit that the rejection of Claims 1-33 under 35 U.S.C. 103(a) as being anticipated by Britton et al. in view of Piskiel et al. has now been overcome and respectfully request that this rejection be withdrawn.

CONCLUSION

Applicants would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

Date: March 30, 2006



Christopher L. Bernard
Registration No.: 48,234
Bradley D. Crose
Registration No.: 56,766
Attorneys for Applicants

DOUGHERTY | CLEMENTS
1901 Roxborough Road, Suite 300
Charlotte, NC 28211 USA
Telephone: 704.366.6642
Facsimile: 704.366.9744
cbernard@worldpatents.com